

CLAIMS:

1. A method of manufacturing an electronic device including:

a first electronic component mounted on one main surface of a wiring board by being thermo-compression bonded by means of a thermo-compression bonding tool with an adhesive resin interposed between a first area of the one main surface of the wiring board and said first electronic component; and

a second electronic component mounted on a second area different from the first area of the one main surface of the wiring board by melting a soldering paste material and higher than said first electronic component in post-mounting height,

said method comprising the step of:

mounting said first electronic component before the mounting of said second electronic component.

2. The method according to claim 1, wherein the adhesive resin is a thermosetting resin.

3. The method according to claim 1, wherein the temperature of the thermo-compression bonding tool at the time that the first electronic component is thermo-compression bonded, is higher than a melting point of the soldering paste material.

4. The method according to claim 1,  
wherein said first electronic component is an  
active part with circuits built therein, and  
wherein said second electronic component is a  
passive part.

5. A method of manufacturing an electronic device,  
comprising the following steps:

a first step of placing a first electronic  
component on a first area of one main surface of a wiring  
board with an adhesive resin interposed therebetween,  
thereafter thermo-compression bonding the first  
electronic component by a thermo-compression bonding tool,  
bonding and fixing the first electronic component to the  
first area of the one main surface of the wiring board,  
and electrically connecting first connecting portions  
provided in the first area of the one main surface of the  
wiring board and electrode pads provided in the first  
electronic component by protruded electrodes interposed  
therebetween, respectively; and

a second step of supplying a soldering paste  
material to second connecting portions provided in a  
second area different from the first area of the one main  
surface of the wiring board, thereafter placing  
electrodes of a second electronic component on the second  
connecting portions with the soldering paste material

interposed therebetween, respectively, and subsequently melting the soldering paste material to thereby electrically connect the second connecting portions of the wiring board and the electrodes of the second electronic component respectively,

wherein said first step is executed before the execution of said second step.

6. The method according to claim 5, wherein said second electronic component has a height extending from the one main surface of the wiring board to the top portion, which is higher than that of the first electronic component.

7. The method according to claim 5, wherein said adhesive resin is a thermosetting resin.

8. The method according to claim 5, wherein the temperature of the thermo-compression bonding tool at the time that the first electronic component is thermo-compression bonded, is higher than a melting point of the soldering paste material.

9. The method according to claim 5, wherein the supply of the soldering paste material is carried out by a dispense method.

10. A method of manufacturing an electronic device including a first electronic component mounted on one main surface of a wiring board by being thermo-compression bonded by means of a thermo-compression bonding tool with an adhesive resin interposed between a first area of the one main surface of the wiring board and said first electronic component, and a second electronic component mounted on a second area different from the first area of the one main surface of the wiring board by melting a soldering paste material, said method comprising the steps of:

mounting said second electronic component before the mounting of said first electronic component.

11. The method according to claim 10, wherein the supply of the soldering paste material is carried out by a screen printing method.

12. The method according to claim 10, wherein said second electronic component is higher than said first electronic component in post-mounting height.

13. The method according to claim 10, wherein said first electronic component is an active part with circuits built therein, and

wherein said second electronic component is a passive part.

14. A method of manufacturing an electronic device, comprising the steps:

a first step of placing a first electronic component on a first area of one main surface of a wiring board with an adhesive resin interposed therebetween, thereafter thermo-compression bonding the first electronic component by a thermo-compression bonding tool, bonding and fixing the first electronic component to the first area of the one main surface of the wiring board, and electrically connecting first connecting portions provided in the first area of the one main surface of the wiring board and electrode pads provided in the first electronic component by protruded electrodes interposed therebetween, respectively; and

a second step of supplying a soldering paste material to second connecting portions provided in a second area different from the first area of the one main surface of the wiring board, thereafter placing electrodes of a second electronic component on the second connecting portions with the soldering paste material interposed therebetween, respectively, and subsequently melting the soldering paste material to thereby electrically connect the second connecting portions of the wiring board and the electrodes of the second electronic component respectively,

wherein said second step is executed before the

execution of said first step.

15. An electronic device comprising:

a first electronic component bonded and fixed to a first area of one main surface of a wiring board with an adhesive resin interposed therebetween, and having electrode pads respectively electrically connected to first connecting portions provided in the first area of the one main surface of the wiring board with protruded electrodes being interposed therebetween; and

a second electronic component fixed to a second area different from the first area of the one main surface of the wiring board, and having electrodes respectively electrically connected to second connecting portions provided in the second area of the one main surface of the wiring board with soldering materials being interposed therebetween.

16. An electronic device comprising:

a wiring board;

a plurality of first electronic components implemented in a first area of one main surface of the wiring board;

a plurality of second electronic components implemented in a second area different from the first area of the one main surface of the wiring board, and each having a height extending from the one main surface

of the wiring board to the top portion, which is higher than that of said each first electronic component; and  
a thermal conductive sheet mounted to said plurality of first electronic components and dismounted to said plurality of second electronic components.

17. The electronic device according to claim 16, further including a radiator mounted to said thermal conductive sheet and formed in a flat size for covering said plurality of first electronic components and said plurality of second electronic components.

18. The electronic device according to claim 16, wherein said plurality of second electronic components are smaller than said plurality of first electronic components in the amount of heat generated during operation.

19. The electronic device according to claim 16, wherein said plurality of first electronic components are semiconductor chips with circuits built therein, and

wherein said plurality of second electronic components are active parts.

20. The method according to claim 10, wherein a surface for thermo-compression bonding said first

electronic component by said thermo-compression bonding tool is smaller than said first electronic component in width.

21. The method according to claim 14, wherein a surface for thermo-compression bonding said first electronic component by said thermo-compression bonding tool is smaller than said first electronic component in width.